DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-022089
Date Inspected: 15-Jan-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	An Qing Xiang, Qiu Wen			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 13BE (NWIT # 08173)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3009K-155, 158, 162

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W

Repair welding of weld joint no: SEG3020E-056 [Bottom Plate (BP) 3091A to Floor Beam (FB) 3343A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 128.3]. The welder is identified as 067520 and was observed

welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2734 Rev-0.

Repair welding of weld joint no: SEG3020D-052 [Bottom Plate (BP) 3091A to Floor Beam (FB) 3343A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 128.3]. The welder is identified as 067520 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2734 Rev-0.

Repair welding of weld joint no: SEG3020Z-080 [Bottom Plate (BP) 3093A to Longitudinal Diaphragm (LD) 3048A, Complete Joint Penetration (CJP) weld in between Panel Points (PP) 126~126.5]. The welder is identified as 051348 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2653 Rev-1.

Repair welding of weld joint no: SEG3020W-037 [Floor Beam (FB) 3317A to Longitudinal Diaphragm (LD) 3048A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 125]. The welders are identified as 045246-051348 and were observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 20126 Rev-0.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AL-026 [Side Plate (SP) 3140B to Floor Beam (FB) 3317A, CJP weld at panel point (PP) 125]. The welder is identified as 066038 and was observed welding in the 4G position. ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020L-022, 23, 24 [Floor Beam (FB) 3327A to Floor Beam (FB) 3325A, CJP weld at panel point (PP) 127]. The welder is identified as 201215 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

OBG Seg 13AW

Repair welding of weld joint no: SEG3013AA-015 [Floor Beam (FB) 3178A to Edge Plate (EP) 3020A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 118]. The welder is identified as 067588 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 20131 Rev-0.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer